

## Tennessee Natural Areas 35th Anniversary

By Brian Bowen



**Fall Creek Falls.** *Photo courtesy of the Division of Natural Heritage.*

Happy Birthday Natural Areas! The year 2006 marks the 35th anniversary of the passage of the Natural Areas Preservation Act of 1971. It was May 15, 1971, when Governor Winfield Dunn signed into law the act to protect areas in Tennessee that are scenic, scientific, geological, and/or have recreation values. This made Tennessee one of the first southern states to enact natural area preservation legislation. The legislation was patterned after the Tennessee Scenic Rivers Act of 1968, which was very progressive for the time and was the first legislation of its kind in the U.S.

There was a flurry of environmental and conservation activity throughout the U.S. in the early 1970s. It is often thought of as the pinnacle of the environmental movement with much public support that led to the establishment of Environment Protection Agency, the Clean Air Act, the Clean Water Act, and the Endangered Species Act. In Tennessee during the early 1970s, there was much public support for the Natural Areas Act that came from many citizen based non-profit organizations like the Tennessee Scenic Rivers Association, Citizens for Wilderness Planning, scientists, and concerned citizens.

Support for the act was also spurred by public recognition that special places were at risk and coincided with a strong public interest in preserving places like Radnor Lake, Savage Gulf, and May Prairie. In Nashville, intense public support to save Radnor Lake resulted in a public fund-raising campaign that culminated in its acquisition and designation as a state natural area in 1974.

Other support for natural areas legislation came from scientists like Dr. Elsie Quarterman, professor emeritus of ecology at Vanderbilt University. She pioneered cedar glade research years before the act was passed, identifying many globally rare cedar glades and barrens in Middle Tennessee. Many of these later became state natural areas, one of which was designated and named the Elsie Quarterman Cedar Glade State Natural Area.

Dr. Quarterman was also instrumental in educating policy makers. She toured Savage Gulf with Governor Dunn so that he might see what he was protecting by signing the act. This directly effected the protection of Savage Gulf, a 15,590-acre state natural area on the Cumberland Plateau in Grundy County that supports towering Tulip Poplars and old growth forest. For her tireless effort in helping conserve Tennessee's natural areas, Dr. Quarterman was presented the 2003 Cartter Patten Lifetime Achievement Award from the Tennessee Conservation League.

Work by other botanists and ecologists also contributed to the discovery of ecological sites that eventually would become new natural areas. Passage of the act enabled the state to acquire these

ecologically significant lands that might otherwise not be protected. This resulted in the protection of May Prairie in Coffee County, which is considered one of the finest examples of a pristine prairie remnant in the eastern U.S. It supports an abundance of rare plants species, some of which are found nowhere else in the state. May Prairie was discovered by U.T. botanist Dr. A. J. Sharp on July 4, 1947. It gained much recognition from the state's botanists who urged its protection.

### **Developing the Program**

Science would become an integral part of natural area protection in Tennessee and would become an important tool, used as criteria to select natural areas. The criteria derived from a science-based methodology developed by The Nature Conservancy called the natural heritage methodology. This includes a ranking system based on biological significance determined by the presence of rare species and rare biotic communities.

In the 1970s, The Nature Conservancy was highly successful in working with state governments to start building a natural heritage network. TNC was able to make agreements with state governments throughout much of the U.S. to hire scientists to conduct inventories of potential natural areas and manage a natural heritage database for rare species. TNC had been very successful in land acquisition and protecting nature preserves (natural areas) and realized that having states house the natural heritage network was a win-win situation both for states and TNC. This would give states the needed tools to identify natural areas and also provide TNC the data to assist in their protection efforts.

In 1975, the Tennessee Heritage Program was established. The program arose from a cooperative agreement between the state of Tennessee, the Federal Bureau of Outdoor Recreation, and The Nature Conservancy. The stated purpose of the Natural Heritage Program was to provide a data management system to assist the Department of Conservation (now TDEC) in the implementation of the state natural areas system. The program evolved into the Division of Ecological Services, which later became the Division of Natural Heritage.

For many years, however, the responsibility for administering the Natural Areas Act was in transition. The act's legislation did not provide for the funding to establish a natural areas program. Responsibility for administering the act was initially given to conservation planners in the department and resided for a short time in the Bureau of State Parks before it was transferred in 1984 to the Division of Ecological Services (Division of Natural Heritage), where it resides today.

It was not until many years later that the division was able to begin to develop the Natural Areas Program. This was accomplished with new funding appropriated near the time of the 30th anniversary of the Natural Areas Act in 2001. The Natural Areas Advisory Committee was instrumental in helping to gain support for this funding. NAAC prepared a white paper that was submitted to the department identifying the needs to make the natural areas program functional.

The NAAC was established in 1984 near the time a natural areas system plan was developed. The plan identified the importance of such a committee, comprised of citizens, environmental organizations, ecologists, and agency directors, which would advise the program. The committee met a few times and then became inactive. It was reconvened in 1996 at the time of the 25th anniversary celebration of the Natural Areas Act. In support of developing a successful program to administer the act, NAAC began working to help establish funding. At that time, there was only a natural areas administrator position and no additional staff administering 39 natural areas covering approximately 60,000 acres.

### **Past and Present Designations**

During the 35-year history since the inception of the act, much activity to designate natural areas occurred at the very outset with the first 25 natural areas designated in 1973 and 1974. Over the next 20 years only 13 more natural areas were designated. There have been 30 new designated state natural areas added since 1994. During this recent active period, there has also been significant acreage acquired and added to existing natural areas.

This activity has coincided with the hiring of a natural areas administrator in 1994. A stewardship

position was added in 1998, then three more positions and funding for stewardship activities was secured after the 30th anniversary celebration in 2001.

During this 35th anniversary year, there may be as many as six new natural areas proposed for designation. This would bring the total number of designated state natural areas to 75 encompassing more than 109,000 acres, if passed by the legislature. The General Assembly must pass legislation to amend the act to add the new natural areas and then the governor signs it into law. Designated natural areas are then protected in perpetuity with restrictions on use to prevent development, damage to the resources, or loss of species.

The process to designate the six new natural areas began with DNH ranking them by criteria for biological significance. The natural areas administrator presented them to the NAAC for evaluation and approval. The NAAC then recommended the natural areas to the TDEC commissioner, who then submitted the department's legislation, which became part of the governor's proposed legislation.

Of these six proposed natural areas, two are cedar glade and barrens communities in the Ridge and Valley that support rare species and exemplary plant communities. These include Crowder Cemetery Barrens (15 acres) and Campbell Bend Barrens (35 acres) in Roane County.

There are also three proposed natural areas that occur on the Cumberland Plateau. Pogue Creek is a 3,000-acre gorge that has scenic cliffs, rockhouses, rich forests, and rare species. The Walls of Jericho is a 750-acre natural area that has a rich flora and rare species. The "Walls" is an impressive geological feature that forms a large bowl shaped amphitheater in a canyon that gives rise to steep 200-foot sheer rock walls. Rugby State Natural Area is a 323-acre site in a small gorge near Historic Rugby.

The sixth proposed natural area is Stillhouse Hollow Falls, which is a 90-acre forested natural area on the Western Highland Rim in Maury County. It has a scenic stream running through it, forming small cascades before plunging 75 feet over the magnificent Stillhouse Hollow Falls.

### **What the Natural Areas Program Does**

The Tennessee Natural Areas Program mission seeks to include adequate representation of exemplary plant communities in the natural areas system, and protect in perpetuity rare, threatened and endangered species and rare plant communities in Tennessee.

The program works with many agencies and organizations to accomplish this mission. Protecting natural areas is not just about acquiring land and/or designating natural areas. Sustaining or recovering rare species or communities in natural areas often requires management. Management activities may include removing invasive exotic species, prescribed burning, thinning vegetation, hydrologic restoration, and securing boundaries (fencing). Other activities may also include providing public access, interpretive information, and adequate signage.

While TNAP is directly responsible for the management of many state natural areas, there are many more natural areas on public land that are owned and/or managed by federal, state, county, and municipal agencies. Also natural areas occur on private lands owned by land trusts, the forest industry, or even individuals (conservation easements are necessary to protect private lands under the act). The TNAP facilitates management on these lands through cooperative management agreements. A CMA identifies the party who will be responsible for specific management actions stated in the natural areas management plan.

The TNAP also works with partners such as "friends" groups and volunteer organizations like the Tennessee Trails Association for hands on volunteer stewardship activities. Much of the trail work in state natural areas is done in cooperation with these groups. In addition, TNAP benefits from working with organizations like the Tennessee Parks and Greenway Foundation whose generosity provides numerous small grants for public access and trail development in state natural areas.

The most recent grants awarded by the TPGF for 2006 will provide money for a parking area, kiosk, signage, and trail at Carroll Cabin Barrens in Decatur County and at Stillhouse Hollow Falls. The Stillhouse Hollow Falls grant was awarded to the Friends of Maury County Parks, and a second grant

was awarded to TTA. The TNAP will be partnering with Maury County Parks, the friends group, and TTA to provide public access to the waterfall. A third grant was awarded to the Friends of Short Springs to build a suspension bridge over Bobo Creek at Short Springs State Natural Area outside Tullahoma in Coffee County.

The TNAP engages the public by providing opportunities to explore natural areas through a series of events each year. During the first full week of April, the TNAP hosts Tennessee Natural Areas Week. The program staff provides the schedule of events that entail wildflower hikes, canoe floats, cave exploration, and birding activities. Usually there are 35 to 45 different activities statewide. The events are coordinated with cooperators and partners who help lead the activities. These activities provide an opportunity for the public to go to natural areas that are less visited and off the beaten path.

The TNAP also offers opportunities for the public to participate in outdoor activities the first Saturday in June for National Trails Day and on the fourth Saturday of September for National Public Lands Day. These are volunteer days for the public to help build trails, remove exotics, or do clean ups, etc. The program also participates in Earth Day activities each year, and throughout the year offers guided hikes and outreach programs on a regular basis.

### **Looking to the Future**

Engaging the public to gain support is critical for the success of the Tennessee Natural Areas Program in protecting and managing natural areas. The 35th anniversary year is a great opportunity for the public to visit state natural areas, to learn more about them, and participate in the activities provided by the program. The 35th anniversary is also a good time for the public to show its support.

There are many natural areas in the state that remain unprotected. As Tennessee's population continues to grow, more and more development pressure will put these areas at greater risk. Public support for funding for acquisition and management activities in natural areas is essential. Public support was instrumental in establishing the Natural Areas Preservation Act of 1971, and today public support is necessary to continue the work of preserving natural areas so that future generations can experience the wealth of Tennessee's great natural heritage.

For more information about the Tennessee Natural Areas Program visit the Web site:  
[www.tdec.net/nh/](http://www.tdec.net/nh/).

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